with implantation is not supported by these two studies designed specifically to test its validity.

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Submitted on July 29, 2004; accepted on November 10, 2004

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doi:10.1093/humrep/deh729

Assisted hatching improves implantation rates on cryopreserved–thawed embryos. A randomized prospective study

Sir,

Gabrielsen *et al.* (2004) evaluated the impact of assisted hatching in cryopreserved human embryo transfers and reported an implantation rate of 11.4% in the assisted hatching group and 5.8% in the control group ($P < 0.05$; Table I). However, when we analysed the rate of positive β-hCG in each group, we observed a higher biochemical pregnancy rate (28.2%) in the control group than in the assisted hatching group (23.5%), although this difference was not significant (Table I).

Table I. Results of Tyrode-assisted hatching on cryopreserved–thawed embryos

	Assisted hatching	Control	*P*
No. of embryo transfer cycles	136	117	
Patient age (mean ± SD)	33.1 ± 4.2	32.8 ± 4.1	NS[a]
No. (%) of thawed embryos transferred			
1	31 (22.8)	35 (29.9)	
2	82 (60.3)	58 (49.6)	
3	23 (16.9)	24 (20.5)	
Total no. transferred	264	223	
Mean no. transferred	1.94 ± 0.63	1.91 ± 0.71	
No. of positive β-hCG[b]	32 (23.5)	33 (28.2)	NS[c]
No. of clinical pregnancies[d]	24 (17.6)	13 (11.1)	NS[c]
Implantation[e]	30 (11.4)[f]	13 (5.8)[g]	< 0.05[c]

[a]Not significant: two-sample *t*-test.
[b]No. of hCG divided by embryo transfer cycles.
[c]χ^2-Test with Yates' correction.
[d]No. of sacs divided by embryo transfer cycles.
[e]No. of sacs divided by total number of embryos transferred.
[f]Eighteen singleton and six twin.
[g]Thirteen singleton.

Therefore, the higher implantation rate in the assisted hatching group may be caused by the high incidence of biochemical abortion in the control group (60.6%), where only 13 in a group of 33 patients with positive β-hCG had their gestational sacs observed by ultrasound. In the assisted hatching group, the biochemical abortion rate was 25.0% (8/32), significantly lower than the control group rate ($P = 0.0057$: Fisher's exact test with Yates' continuity correction).

On the other hand, there must be trophoblastic hCG production to detect plasma levels of this hormone. For this, it can be assumed that embryo hatching and endometrial implantation process had happened previously. Therefore, it could not be established that assisted hatching technique brought some benefits, since the difference between both positive β-hCG rates was not significant.

Taking into consideration that the assisted hatching objective is facilitating the hatching process, it could not be concluded that this technique caused a lower incidence of biochemical abortion and a higher implantation rate. This higher implantation rate observed in the assisted hatching group must be caused by an overly high biochemical abortion rate in the control group, which was significantly higher than the assisted hatching group rate. This fact may be associated with a poor embryo quality in the control group or even with an accident.

In our service, we do not perform routinely the assisted hatching technique in thawed embryos since there is no sufficient data to validate this practice. For us, this study was not able to demonstrate some advantage of the assisted hatching technique after the embryo thawing procedure. We are waiting for future prospective studies that might be able to demonstrate some real advantage for the assisted hatching technique in this situation, although we would like to congratulate Dr Gabrielsen and his collaborators for the initiative in realizing a prospective study regarding this controversial subject.

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Submitted on October 28, 2004; accepted on December 10, 2004

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doi:10.1093/humrep/deh730